

iBRIEF / eCommerce**Cite as 2001 Duke L. & Tech. Rev. 0005**

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ARE ONLINE BUSINESS TRANSACTIONS EXECUTED BY ELECTRONIC SIGNATURES LEGALLY BINDING?

¶1 Most of us believe that we make contracts over the Internet all the time. We buy books and computers, arrange for hotels and planes, trade stocks, and apply for mortgages. But as recently as seven months ago that transaction was most likely not legally binding. This uncertainty led many practitioners, businesspeople, and consumers to question the efficacy of contracts executed by electronic signatures. Without a uniform standard, many jurisdictions ruled inconsistently, while other jurisdictions did not consider the issue. This disparate treatment threatened the legitimacy of online agreements and deprived both consumers and businesses of the certainty and predictability expected from well-developed markets. The law's formalities evolved outside of the digital world, and the process of adapting them to it has proven to be more difficult than expected. In June of 2000, Congress attempted to solve this problem with the Electronic Signatures in Global and National Commerce Act (E-Sign).

¶2 E-Sign was not without a legal heritage. The law has been struggling for centuries with the question of the formalities required to conclude different types of contracts. In the period before E-Sign, courts turned to these older bodies of rules, such as the "Statute of Frauds" for assistance. This iBrief will discuss, as pertinent background, the means by which courts and legislatures have applied the statute of frauds to electronic transactions. The analysis will then examine the thrust of E-Sign by examining the statutory language and congressional goals. Finally, and most importantly, it will discuss relevant concerns and important benefits of E-Sign to show that this legislation will likely achieve its goal of unraveling some of the current uncertainty.

Background of the Electronic Signatures Act

¶3 On June 30, 2000, President Clinton signed into law the Electronic Signatures in Global and National Commerce Act (E-Sign).^{[1](#)} Congress promulgated this much anticipated legislation with the intention of streamlining business by allowing quicker, more convenient, and less expensive paperless transactions. Although 40 states had already enacted laws to provide for the use of electronic signatures, these laws varied greatly. Congress tailored E-Sign to give legal and uniform status to electronic signatures.

E-Sign and the Statute of Frauds

¶4 As eCommerce has exploded in the past decade, courts have wrestled with the challenge of applying traditional contract law, partially guided by the statute of frauds, to electronic transactions. The statute of frauds requires certain transactions to be in writing and signed by the parties involved. The Courts faced with the question of whether electronic transactions satisfy this "writing requirement," have answered "yes."²

¶5 This confusion creates some important questions as to whether courts, in future cases, will consistently uphold electronic contracts. This uncertainty poses serious problems that will definitely hinder eCommerce. Among this confusion lies the possible loss of the security and accountability provided by the statute of frauds. As Representative Davis noted in US House discussion of E-Sign:

[O]ne of the most critical components of any successful market economy to the digital environment [is] the existence of the rule of law and the enforcement of written agreements and transactions that follow predetermined rules of notice, disclosure rights, and obligations. All other things being equal, when parties know that the signatures guarantee accountability, that they gain benefits, and at the same time undertake certain obligations in return, their behavior is necessarily shaped by the certainty which results when parties are contractually bound.³

¶6 Therefore, in order to gain the protections of the statute of frauds, electronic signatures must possess some measure of security and accountability. This is an issue where Congress, the states, and, most importantly, the markets themselves, must continue to establish new guidelines that both increase and improve security and accountability of online transactions.

UETA: What it is and its Acceptance by the States

¶7 Recognizing the virtues of predictable laws, the National Conference of Commissioners on Uniform State Laws approved the Uniform Electronic Transactions Act (UETA) in 1999 and proposed it for adoption by all the states. The UETA provides that all electronic contracts are valid unless they are illegal, unconscionable or contain some other fatal flaw. Further, an electronic signature can constitute a binding signature so long as the signature can be traced to a particular individual who took an affirmative act such as entering a password or clicking on an "I agree" button. However, at this point in time, only eighteen states have elected to adopt UETA. Reacting to the slow movement of states to adopt the UETA, Congress responded with

the passage of E-Sign in June 2000.

Statutory Language & Goals of the Electronic Signatures Act

¶8 Congress enacted E-Sign with three goals in mind: First, E-Sign allows Americans to use and sign legally binding contracts online and also stems fears that online contracts will not have legal effect. Second, E-Sign increases business efficiency by speeding up the contracting process. Finally, E-Sign strengthens consumer protection, as it relates to eCommerce, by mandating disclosures and retention of accurate records, and further, by creating specific exceptions where signatures must be on paper for public policy reasons.

¶9 The heart of E-Sign's language provides that electronic signatures, contracts or records relating to transactions in, or affecting, interstate commerce "may not be denied legal effect, validity, or enforceability solely because [they are] in electronic form."⁴ E-Sign also states that, "a contract relating to such transaction may not be denied legal effect, validity, or enforceability solely because an electronic signature or electronic record was used in its formation."⁵ These provisions are aimed at eliminating the uncertainty that businesses now face about the legal validity of their online business contracts. E-Sign, as currently enacted, does not "require any person, other than certain government agency transactions, to use or accept electronic records or electronic signatures."⁶ Therefore, certain governmental agencies may mandate the use of electronic signatures, but no individual will be required to use or accept electronic signatures in their private transactions. This indicates that Congress does not wish to place individuals who lack Internet access at an economic disadvantage.

¶10 E-Sign affects and negates only statutorily imposed requirements which require "contracts or other records be written, signed, or in non-electronic form."⁷ This was written so as not to preempt any existing consumer protection laws.⁸ However, E-Sign also contains significant protection requirements concerning consumer disclosures and retention of accurate records when electronic signatures are involved. E-Sign helps to ensure that consumers are informed about the contents and the form of the electronic record and that consumers consent to the use of electronic records in their individual transactions.

¶11 For example, many existing statutes require information concerning transactions in or affecting interstate commerce to be provided or made available to a consumer in writing. Under E-Sign, an electronic record can be provided in place of a written record if the consumer consents and is provided with a "clear and conspicuous statement" informing the consumer of certain rights.⁹

Documents that Cannot be Electronically Signed

¶12 E-Sign also makes specific exceptions for certain documents and transactions that, for important public policy reasons, mandate a written document and/or signature. For instance, E-Sign does not apply to state statutes governing:

- the "creation and execution of wills, codicils, or testamentary trusts";
- "adoption, divorce, or other matters of family law;" or,
- the Uniform Commercial Code, as in effect in any state, other than §§1-107 and 1-206 and Articles 2 and 2A.^{[10](#)}

¶ 13 The provisions of E-Sign will also not apply to:

- court orders or notices, official court documents (including briefs, pleadings, and other writings) [however, many courts are shifting to electronic filing of court documents];
- any cancellation or termination of utility services;
- certain real estate issues (default, repossession, etc.);
- the cancellation or termination of health insurance or benefits or life insurance benefits;
- recall of a product, or material failure of a product, that risks endangering health or safety; or,
- any document required to accompany any transportation or handling of toxic or dangerous materials.^{[11](#)}

¶ 14 The statutory language of E-Sign clearly indicates its ability to achieve congressional goals and to further encourage the necessary and rapid progress of electronic commerce. This language, however, also shows the Congress' sensitivity towards protecting consumers as well as attempts to ensure the growing safety and accountability of electronic signatures.

¶ 15 The inefficiencies of paper-based communication have prompted millions of Americans to participate in online transactions. With this technological change in mind, both federal and state governments are striving, now more than ever, to facilitate eCommerce. Although there is no consensus regarding the best way to achieve that objective, it is generally accepted that effective electronic signature legislation will remove barriers in the eCommerce realm and instill trust and predictability in parties doing business online.

E-Sign's Appropriate Place in the World of the Electronic Signatures

¶ 16 As indicated previously, although the populace normally assumes their electronic transactions have legal effect, they may be mistaken. The concern is whether electronic records and signatures meet established statutory and regulatory legal formalities such as writing and signature requirements. Often, for an agreement to be enforceable, the law requires an agreement be both documented in writing and signed by the party to be bound. For example, the statute of frauds, in most jurisdictions, requires that certain types of contracts be set forth in writing to be enforceable.

¶ 17 If digital signatures were given the legal force of handwritten signatures, many concerns espoused by consumers and sellers alike would be put to rest. The introduction of secure digital signatures would facilitate doing business online because there would be less concern over whether individuals were using false credit card and checking account numbers or mailing addresses.

¶ 18 Courts today are increasingly addressing whether electronic records and signatures can meet the statutory requirements. It has consistently been held that writings are not limited to ink on paper, but rather are embodiments of communication reduced to tangible form.¹² In addition, a signature is a symbol coupled with the intent of a party to authenticate a writing.¹³ Realizing that faxed signatures have been held to constitute efficacious signatures,¹⁴ it seems plausible that code used as an electronic record and intended as a signature will meet the requirement.

¶ 19 However, through the year 2000, courts and state legislatures have been inconsistent in their treatment of electronic transactions. Some states have adopted legislation formally sanctioning electronic contracts and signatures, while others have been reluctant. Moreover, even those statutes endorsing electronic technologies differ in terms of what they consider deserving contractual dignity. Typically, legislation has taken one of three approaches: (1) all electronic signatures satisfy legal signature requirements; (2) electronic signatures satisfy legal signature requirements only when they possess certain security attributes; or (3) digital signatures alone satisfy legal signature requirements.

¶ 20 These disparate approaches foster uncertainty for businesses attempting to participate in eCommerce in multiple jurisdictions, especially if the businesses do not use electronic signatures that are compliant in all jurisdictions. However, E-Sign has attempted to address this uncertainty. While this legislative enactment could potentially resolve the

issue, until courts circumscribe the boundaries of the statute contracting parties should explicitly state, online or in writing, that they expect their electronic transactions to be enforced.

¶ 21 Safe and effective electronic commerce is indispensable in today's technology driven marketplace. Electronic signature legislation has the potential to act as a method for advancing electronic commerce, but it is imperative to formulate legislative approaches as case law and technology develops.

Consequences and Benefits

Concern #1: Are Online Documents and Transactions Secure?

¶ 22 The passage of E-Sign is a substantial step in defining guidelines to control this growing area of commerce. This Act will significantly alter the marketplace and current legal practice. However, one major concern that still must be addressed is security of electronic signatures. Earlier this year in the United Kingdom, the first digital signature made by a cabinet minister was criminally manipulated within 24 hours of its creation! A hacker was able to insert a statement into the document that had been e-signed, making it appear as if authority had been given to a provision that had not been agreed upon. This hacking was performed by an Internet computer security consultant, breaking into a web server, distinctly for the purpose of illustrating concerns with the new system.

¶ 23 Security can be viewed as dealing with two separate issues; first, security of the document as it travels through cyberspace, and second, security of the signature ensuring that it is implemented by the person it represents. E-Sign made electronic signatures legally binding on many documents. However, the bill does not specify what form the signature should take. In fact, the bill specifically disallows any states from requiring any type of encryption or signature technology. This will allow the marketplace to develop the most efficient signature security technologies. Unfortunately, this will take time, and presently, adequate security is a relevant concern.

Concern #2: Uniformity Between State and Federal Law

¶ 24 Another concern with the enactment of E-Sign is uniformity between state and federal law. As of today, eighteen states have adopted UETA and, in these states, E-Sign essentially allows UETA to govern. If a state has adopted a statute dealing with e-signatures

other than UETA, E-Sign allows these statutes to be effective as long as they do not conflict with E-Sign's provisions and do not specify any particular type of technology that must be used. However, a consumer or businessperson, found in these situations, will be most protected if they make strong efforts to comply with all applicable state and federal laws. Key issues as to contract formation and other concerns traditionally addressed by state law are still governed by the states.

Concern #3: Disparate Treatment of Rich and Poor

¶ 25 Consumer groups fear that companies may trick unwary consumers into using electronic signature technology by sending notice on the Internet only and put in fine print that all future business and or notices will be sent online. This procedure would manipulate unwary consumers into using the new online technology. Others have taken this one step further by speculating that some companies might begin to require purchasers to use the online technology. Although speculation that companies could require all business to be transacted online may seem unlikely, companies may provide discounts primarily to online transactions again to the detriment of those who do not have access to online services. The effect of E-Sign on those who do not have access to the Internet is a major concern among equal rights groups. While the statutory language of E-Sign includes an equal protection thrust the possibility of disparate treatment between rich and poor may increase as the breadth of electronic commerce grows.

Benefit #1: Ease of Transacting Business Online

¶ 26 A major benefit of E-Sign will be the ease of transacting business online both for the consumer and for the corresponding companies. Both will have more control over when and how they transact business. For instance, they will save time by being able to close home mortgages from the convenience of home or office and could save the time customarily spent signing documents at the car lot. As consumers begin to see the ease of transacting online, many businesses will quickly move to fill this new market niche; this trend can already be seen by the recent explosion of online brokers. Well respected brokerage houses such as CSFB Direct, Ameritrade and Fidelity Investments have all moved to allow consumers to set up online trading accounts without forcing them to mail in any follow-up paperwork. While this may seem like a trivial benefit, up to 50% of those who traditionally set up an online brokerage account never mailed any supporting paperwork to activate their account. Another industry that has commented heavily on the effects of E-Sign has been the insurance

industry. Insurance agents petitioned strongly that they should not be held responsible for contracts that their clients entered into online, directly with the insurance company, without their consultation and advice. Others have speculated that, in the future, the need for an insurance agent will disappear as consumers simply log on to the insurance company's web site and choose or change their policies to fit their needs, consummating the transaction with their electronic signature. In this way, legally binding electronic signatures promote disintermediation.

Benefit #2: Political Uses

¶ 27 Electronic signatures will not only effect commerce but has already begun to find its way into the political arena. The ability to apply legally binding signatures to online documents has allowed grassroots mobilization of many political groups that have traditionally not been able to sustain a voice in politics. For example, e-signatures have been used in California to get signatures for petitions put out by political reformists. Before the advent of electronic signatures, underfunded causes had not been able to efficiently collect the necessary signatures to demonstrate their wide support. Also, earlier last year, the Democratic primary in Arizona allowed voters to cast their vote for the state party over the Internet by implementing electronic signatures.

Conclusions & Reflections

¶ 28 The implementation of E-Sign now enables businesses and consumers alike to take advantage of the economic opportunities provided by the millions of people who make use of the Internet on a daily basis. By simply stating that a signature shall not be denied legal effect because it is in electronic form, Congress not only validated electronic signatures as legally binding, it also delegated to the market the task of discovering the best methods of implementing this new technology. Now the market may determine, in each instance, what form of electronic signature best fits the particular needs of the parties to the particular transaction. With these market forces in play, the best means of implementing and securing these online transactions will likely be created by the marketplace allowing both consumers and businesses to capitalize upon this new and convenient method of transacting commerce.

¶ 29 The enactment of E-Sign will not cause traditional ways of contracting to completely disappear. However, in a world where time and convenience are fast becoming requirements implicit in consumer attitudes, having an efficient and easy way to create legally binding contractual relationships will add strong value to twenty-first century

commerce.

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Footnotes

- [1.](#) Electronic Signatures Act of 2000, Pub. L. No. 106-229.
- [2.](#) *See, e.g.*, In re RealNetworks, Inc. Privacy Litig., 2000 U.S. Dist. LEXIS 6584 (N.D. Ill. 2000) (holding that a licensing agreement on a web site will constitute a writing if the agreement can be printed and stored); CompuServe Inc. v. Patterson, 89 F.3d 1257 (6th Cir. 1996) (recognizing the validity of electronic contract between an internet service provider and one of its customers).
- [3.](#) 146 Cong. Rec. H4346, 4359 (daily ed. June 14, 2000) (statement of Rep. Davis).
- [4.](#) *See* 15 U.S.C.S. §7001(a)(1).
- [5.](#) *See* 15 U.S.C.S. §7001(a)(2).
- [6.](#) *See* 15 U.S.C.S. §7001(b)(2).
- [7.](#) *See* 15 U.S.C.S. §7001(b)(1).
- [8.](#) *See* 15 U.S.C.S. §7001(c)(2)(A).
- [9.](#) *See* 15 U.S.C.S. §7001(c)(1)(A) & (B).
- [10.](#) *See* 15 U.S.C.S §7003(a)(1)-(3).
- [11.](#) *See* 15 U.S.C.S. §7003(b).
- [12.](#) U.C.C. §1-201(46) (1998).
- [13.](#) U.C.C. §1-201(39) (1998).

[14.](#) *See* Madden v. Hegadon, 565 A.2d 725 (N.J. Super. 1989), *aff'd* 571 A.2d 296 (N.J. 1989).